MISSOURI STATE EMPLOYEES' RETIREMENT SYSTEM

INVESTMENT POLICY

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Adopted by the Board of Trustees June, 1995
Last Revised September 20, 2001

INVESTMENT POLICY

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I. Mission Statement

The Board of Trustees (Board) of the Missouri State Employees' Retirement System (MOSERS or System) has a fiduciary responsibility to the members and beneficiaries of the System. In recognition of this responsibility, the Board hereby adopts the following mission statement:

> ***MOSERS' Mission***
>
> *To play an integral role in the future financial security of plan participants by promptly and courteously delivering quality benefits and information which members value and trust, through professional plan administration and prudent management of System assets.*

The purpose of this mission statement is twofold. First, it provides broad operational direction to the Board, staff, and contractors of MOSERS. Second, it makes an explicit promise to the members of the System regarding the future provision of retirement benefits. Bearing the System's mission in mind, the Board hereby adopts the following Investment Policy.

II. Statement of Purpose of Investment Policy

This document specifically outlines the investment philosophy and practices of MOSERS and has been developed to serve as a reference point for the management of System assets. In order to assist System participants in achieving their financial security objectives, it is crucial that the Board adopt a long-term plan by which the assets of the System will be maintained and enhanced through prudent investments. This plan is intended to ensure that the level of assets is adequate to cover the accumulated liabilities of the system. **This is an official policy document of MOSERS. Deviation from this document is not permitted without explicit written permission, in advance, from the Board.**

In developing the Investment Policy, the Board understands and accepts its fiduciary obligations to the members of the System. These obligations are legal in nature, and are outlined in Section 105.688. of the Revised Statutes of Missouri. The statute is reproduced below and incorporated in its entirety as part of the Investment Policy:

> The assets of a system may be invested, reinvested and managed by an investment fiduciary subject to the terms, conditions and limitations provided in sections 105.687. to 105.689. An investment fiduciary shall discharge his or her duties in the interest of the participants in the system and their beneficiaries and shall:

1. Act with the same care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a similar capacity and familiar with those matters would use in the conduct of a similar enterprise with similar aims;
2. Act with due regard for the management, reputation, and stability of the issuer and the character of the particular investments being considered;
3. Make investments for the purposes of providing benefits to participants and participants' beneficiaries, and of defraying reasonable expenses of investing the assets of the system;
4. Give appropriate consideration to those facts and circumstances that the investment fiduciary knows or should know are relevant to the particular investment or investment course of action involved, including the role of the investment or investment course of action plays in that portion of the system's investments for which the investment fiduciary has responsibility. For purposes of this subdivision, "appropriate consideration" shall include, but is not necessarily limited to a determination by the investment fiduciary that a particular investment or investment course of actions is reasonably designed, as part of the investments of the system, to further the purposes of the system, taking into consideration the risk of loss and the opportunity for gain or other return associated with the investment or investment course of action; and consideration of the following factors as they relate to the investment or investment course of action:

   (a) The diversification of the investments of the system;
   (b) The liquidity and current return of the investments of the system relative to the anticipated cash flow requirements of the system; and
   (c) The projected return of the investments of the system relative to the funding objectives of the system;

5. Give appropriate consideration to investments which would enhance the general welfare of this state and its citizens if those investments offer the safety and rate of return comparable to other investments available to the investment fiduciary at the time the investment decision is made.

The statute provides the foundation for development of MOSERS' Investment Policy. The language in the statute, however, may seem rather tedious to a layperson. For brevity and clarity, the Board hereby adopts the following interpretation of the statute as its "Guiding Principles":

<u>Principles Guiding MOSERS' Investment Activity</u>

1. *Preserve the long-term corpus of the fund.*
2. *Maximize total return within prudent risk parameters.*
3. *Act in the exclusive interest of the members of the System.*

These principles, combined with the applicable sections of the Revised Statutes of Missouri, serve as the basic guideline for the Investment Policy.

III. Investment Philosophy

MOSERS' mission statement indicates that among its key duties is provision of benefits to members. Accordingly, it is critical that the System accumulate and maintain the liquid financial reserves necessary to fulfill this obligation.

Liquid financial reserves shall be obtained from two sources: (1) Contributions from the State of Missouri and (2) Return on Investments. For purposes of developing this investment Policy, the System assumes at this time that the stream of contributions from the State will continue in the future and remain an important source of funding for MOSERS. More important than the level of contributions, in terms of total dollar impact, is the return on investment of the assets of MOSERS.

Based on actuarial assumptions adopted by the Board, a real return on invested assets of 4.5 percent per annum must be achieved in order for the System to accumulate the assets needed to meet benefit obligations while at the same time maintaining the System's level percent of payroll contribution rate objective. However, based on general beliefs about the long-term nature of the pension liabilities and the fact that equities are expected to generate the largest real returns over long periods of time, the Board has adopted an asset allocation model that is expected to achieve real returns in excess of the real rate objective used by the actuary in evaluating the System and in computing contribution rates. In the Board's view, taking on the additional risk of achieving returns in excess of the actuarial real rate objective is a worthwhile endeavor for at least two reasons: (i) returns in excess of the assumed rate will allow the State to enact benefit increases without significantly increasing contribution rates and, (ii) returns in excess of the assumed rate could be used to pay down the existing unfunded liability ahead of schedule, ultimately reducing the State's contributions for retirement benefits and producing savings which could be allocated to wages and other benefits for state employees.

Because of the higher than typical allocation to equities, it is extremely important for the balance of the portfolio to be structured with diversification as the primary focus. This can be accomplished by identifying and investing in assets with low volatility and/or whose price movements seem to have very little or no relationship to the price movements of equities. All of these diversifying investments are held and measured in a MOSERS' defined asset class called the Diversification Pool. These assets include a

combination of nominal bonds, real bonds, commodities, and cash. From time to time other assets may be added to this pool based on their merits as diversifiers to equities.

The Board recognizes that even though its investments in general, and equities specifically, are subject to short-term volatility, it is critical that a long-term investment focus be maintained. This prevents ad-hoc revisions to the philosophy and policies in reaction to either speculation or short-term market fluctuations. In order to preserve this long-term perspective, the Board has adopted the following formal review schedule[1]:

Formal Review Agenda Item	**Formal Review Schedule**
Policy Mix	At least every five years (last revised March 16, 2000)[2]
Strategy Mix	At least every five years (last revised March 8, 2001)
Performance Review of Policy Mix relative to Policy Benchmarks	Quarterly
Performance Review of Strategy Mix relative to Strategy Benchmarks	Quarterly
Policy Revisions	As needed

For assets other than those which the Board has directed the Investment Staff (staff) to invest, the Executive Director (Director), Chief Investment Officer (CIO) and the External Asset Consultant (Consultant) may, pursuant to the Board's Manager Hiring and Termination Policy (Appendix II), retain or dismiss external investment managers (managers) to implement the Board's investment strategy. These managers will be given specific tactical roles within the overall strategic investment plan. Depending on their assignments, the managers may be judged on some or all of the following: (i) consistency of philosophy, style, and key personnel, (ii) performance relative to an appropriate index or proxy group, and (iii) ability to add incremental value after costs. The Staff and Consultant will be responsible for performance monitoring and supervision of the System's managers, and will provide reports to the Board based on the above schedule in addition to reports to the Board summarizing the findings and conclusions from the semi-annual due diligence meetings with each manager.

In determining its philosophy toward risk, the Board has properly considered, in addition to fiduciary obligations and statutory requirements, the System's purpose and characteristics, financial condition, liquidity needs, sources of contribution, income, and general business conditions. As was discussed in the Investment Philosophy section of this document, a key characteristic of the System is the extremely long time horizon upon which asset allocation decisions should be based. With this long time horizon in mind, the Board has determined that a relatively high allocation to equities is warranted even

[1]The Board reserves the right to review any of these topics at any time.

[2]Annually, the Chief Investment Officer will be responsible for providing an update to the Board.

though these assets have exhibited high volatility over shorter time frames. Furthermore, it is the Board's position that the merits of excess real returns generated by equities over long periods of time far outweigh the negatives associated with additional short-term volatility incurred by investors in the asset class.

IV. Roles & Responsibilities

MOSERS is one of the larger public pension funds in the United States; as such its operational requirements are complex. In order to properly administer the System and carry out its investment obligations, the Board relies heavily on both Staff and external contractors. Because of the number of parties involved, their roles as fiduciaries must be clearly identified. Furthermore, such identification increases operational efficiency, ensures clear lines of responsibility, and reduces or eliminates duplication of effort.

Board of Trustees

The Board has the responsibility of establishing and maintaining broad policies and objectives for all aspects of the System's operation. MOSERS' Board is responsible for prudent utilization of the System's funds and assets involving retirement, life, and disability insurance benefit plans. The Board establishes contribution rates and determines policies pertaining to the administration of the plans and benefits under their jurisdiction and responsibility. Specifically with regard to investments, the Board seeks the recommendations of the Staff and Consultant prior to taking action. In keeping with their obligation to serve as governing fiduciaries, changes to any of the following will require the Board's involvement and approval:

1. The Investment Policy and Appendices
   - Rebalancing Policy (Appendix I)
   - Service Provider Hiring & Termination Policy (Appendix II)
   - Brokerage Policy (Appendix III)
   - Proxy Voting Policy (Appendix IV)
   - Securities Class Action Litigation Policy (Appendix V)
   - Economically Targeted Investment Policy (Appendix VI)
   - Consultant Notification Policy (Appendix VII)
   - Securities Lending Policy (Appendix VIII)
2. The Policy & Strategy Asset Allocation Mix
3. Performance Benchmarks for the Policy & Strategy Mix
4. The Internal Management Program
5. The Investment Department Budget

6. All other issues of investment policy not specifically enumerated here

Executive Director

The Director is appointed by, and serves at the pleasure of the Board. The Director is responsible for planning, organizing, and administering the operations of the System under broad policy guidance and direction from the Board. The Director, with the assistance of Staff, monitors the performance of the investment portfolio; ensures that funds are invested in accordance with Board policies; studies, recommends, and implements policy and operational procedures that will enhance the investment program of MOSERS; and ensures that proper internal controls are developed to safeguard the assets of the System. In fulfilling these responsibilities, the Director relies heavily on the Staff and Consultant**. (Unless the term clearly has a different meaning based on context, as used throughout this document the term "Staff" means the Director or an employee of MOSERS designated by the Director.)**

Internal Investment Staff

The Internal Investment Staff (Staff) provides internal investment management and consulting services to the Board and Director. The primary functions of the Staff include managing portions of the MOSERS' portfolio; analyzing and rebalancing the overall asset allocation of the System and its portfolio structure; participating in the hiring and firing of external managers based on a policy approved by the Board; providing technical advice to and monitoring the external managers; serving as a liaison between the Board and the investment community; and informing and advising the Board and Director on financial, economic and political developments that may affect the System. The Staff also works closely with the Consultant on a project-specific basis. The Staff reports directly to the CIO who in turn reports to the Director. The frequency and content of reports from the Staff to the Board will be dictated by the requirements of this Investment Policy as well as directives from the Board.

Internal Auditor

The Internal Auditor reports directly to the Director and, if in the opinion of the Internal Auditor circumstances warrant, may report directly to the Board. The Internal Auditor is independent of the System's operational activity and is responsible for providing objective audit and review services for the entire System, including the Investment Department. The Internal Auditor's services emphasize the promotion of adequate and effective internal controls at a reasonable cost and result in suggested improvements that will lead to economies and efficiencies in the System's operations. With regard to the investment program, the Internal Auditor performs an audit of each of the internally managed portfolios at least annually and reports the results of these audits to the Director and Board. In this role, the Internal Auditor, in conjunction with the Consultant, serves as an additional layer of independent oversight for the internally managed assets. Periodically the Internal Auditor will also conduct a review of the Consultant sufficient to offer an opinion regarding the firm's independence, objectivity, depth of resources, and viability.

External Asset Consultant(s)

The Consultant's duty is to work with the Board and Staff to manage the investment process. This includes regular meetings with the Board to provide an independent perspective on the Fund's goals, structure, performance and managers. The Consultant will review asset allocations and performance in conjunction with the Staff, and make recommendations to the Board as appropriate. The Consultant will provide performance reporting information on internal investment management by Staff. The Consultant will assist with external money manager selection and will promptly inform the Board and discuss the impact of material changes taking place within any current manager's investment process. The Board may also elect to retain other consultants who specialize in specific areas of asset consulting.

External Service Providers

Pursuant to the Board's Service Provider Hiring and Termination Policy (Appendix II), the Director, CIO and the Consultant may retain or dismiss service providers (as described in the policy) to implement MOSERS' investment program. Any decision to retain or dismiss a service provider will be promptly reported to the Board together with a detailed explanation of the rationale for such decision. Service providers will be given explicit written directions detailing their particular assignments, and will be expected to conduct business on behalf of the System in accordance with the mandate for which they were hired.

Money managers and securities lending managers will select, buy, sell and loan specific securities pursuant to their guidelines and in accordance with the Brokerage Policy detailed in Appendix III of this policy, where applicable. Discretion is delegated to the managers to carry out investment actions as directed by the System. Managers will provide performance reporting upon request utilizing standardized reporting formats. Specific operational information for each manager is addressed at length in each manager's operational guidelines maintained in the Implementation Manual.

The master custodian(s) will hold all cash and securities. In addition, a bank or trust depository arrangement will be utilized to accept and hold cash prior to allocating it to the investment managers, and to invest such cash in liquid, interest-bearing instruments. The custodian will be responsible for providing an on-line records maintenance system, performance reporting, fund accounting on both a trade date and settlement date basis and other services as defined in the contract. If agreed to contractually, the custodian may act as a lending agent for MOSERS.

V. Asset Allocation - Policy and Strategy Objectives

MOSERS' investments are divided into the following general asset classifications: Domestic Equities, International Equities, and Diversification Pool. The latter consists of nominal bonds, real bonds, commodities and cash. It is common practice to construct portfolios using combinations of asset classifications in order to improve the risk/return profile of the fund. This concept is called diversification, and was discussed briefly in Section III. The asset allocation decision is generally regarded as the most important decision to be made in the investment management process. Studies have indicated that as much as 90% of an investment portfolio's performance can be attributed to the asset allocation decision.

In order to determine the optimum mix of asset classes in a portfolio, four factors must be considered:

1. The expected rate of return for each asset classification;
2. The estimated risk of each asset classification (expressed as the standard deviation of the rate of return);
3. The correlation between the rates of return of the asset classifications; and
4. The investment objectives and risk constraints of the fund.

Once this analysis is completed, the asset mix that produces an optimal risk/return tradeoff can be determined. Based on its determination of the appropriate risk tolerance for the System, and its long-term return expectations, the Board has chosen the following Asset Allocation Policy Mix:

POLICY MIX	***PERCENT OF TOTAL FUND***
Domestic Equity Investments	*50.0%*
International Equity Investments	*25.0%*
Diversification Pool Investments	*25.0%*

Unless the decision has been made to implement the Policy Mix in a completely passive fashion with the intent of replicating the returns of the Policy Benchmarks, it becomes important for the Board to make certain strategic decisions regarding the portfolio structure. The major types of strategic decisions typically include:

- The passive vs. active management mix
- The internal vs. external management mix
- Any strategic overweights / underweights based on size, style or sector

Based on a variety of considerations, the Board has chosen the following Strategy Mix:

STRATEGY MIX	***PERCENT OF TOTAL FUND***
35% of the Domestic Equity Portfolio managed passively in an S&P 500 index like portfolio.	*17.5%*
15% of the Domestic Equity Portfolio managed in an enhanced index style by one or more managers with tight risk control relative to the S&P 500	*7.5%*
20% of the Domestic Equity Portfolio managed in an enhanced index style by a manager(s) with expertise in non-large-cap stock investing and value stock investing.	*10.0%*
24% of the Domestic Equity Portfolio managed actively by one or more managers holding a relatively small (in most cases 20-40) number of stocks.	*12.0%*
6% of the Domestic Equity Portfolio to be managed by MOSERS staff in a Tactical Allocation Fund to take advantage of shorter-term opportunities in the marketplace.	*3.0%*
60% of the International Equity Portfolio managed actively in Developed Countries by one or more managers.	*15.0%*
40% of the International Equity Portfolio managed passively/semi passively in Developed and Emerging Countries by one or more managers with tight risk control relative to a composite benchmark comprised of the MSCI EAFE and EMF benchmark.	*10.0%*
40% of the Diversification Pool managed passively, by MOSERS’ Internal Staff in a portfolio consisting of long durated real bonds.	*10.0%*
24% of the Diversification Pool managed passively/semi-passively by one or more managers in a portfolio consisting of mortgage and asset backed securities with tight risk controls relative to the Lehman Mortgage (67%) and the Lehman Asset Backed Indices (33%).	*6.0%*
16% of the Diversification Pool managed, by MOSERS’ Internal Staff in a portfolio consisting of high quality, intermediate duration corporate bonds.	*4.0%*
10% of the Diversification Pool managed actively by a Treasury only manager given discretion along the yield curve and a maximum portfolio duration of 7.0.	*2.5%*
10% of the Diversification Pool managed passively/semi-passively by one or more manager(s) investing in a commodity overlay program with the intent of providing a return comparable to the Goldman Sachs Commodity Index.	*2.5%*

VI. Asset Allocation - Policy & Strategy Benchmarks

The most important investment return objective to be considered when evaluating the Fund's performance is measured by a comparison of the Fund's return to the real rate of return that must be achieved in order for MOSERS to meet its benefit obligations while maintaining the level percent of payroll contribution rate objective. While it is not critical to perform this comparison over shorter time periods (one to five years) the Fund's returns relative to its real rate of return objective over longer time periods (5 to 30 years) should be closely monitored.

MOSERS' real rate of return objective is to achieve a total return of at least 5.0 percent per annum in excess of the inflation rate as measured by the annual change in the Consumer Price Index.[3]

Another important investment return objective to be considered when evaluating the Fund's performance is measured by a comparison of the Fund's returns to a set of asset allocation policy benchmarks. The asset allocation policy benchmarks represent the broad investment opportunities of each asset class in which MOSERS has chosen to invest. The returns of the asset allocation policy benchmarks should be used as reference points against which the Board, Staff and the Consultant compare the Fund's total asset class returns. In situations in which the Board makes decisions to strategically overweight/underweight certain areas and/or to manage a portion of the assets actively, then this comparison should not be made to draw conclusions over time periods of less than a full economic cycle[4]. However, regardless of whether results are favorable or not over a full economic cycle, every effort should be made to determine if any strategic decisions which have been made are still justified given current information.

The Asset Allocation Policy Benchmarks are:

POLICY BENCHMARKS	***PERCENTAGE OF TOTAL BENCHMARK***
Russell 3000	***50.0%***
MSCI EAFE + EMF	***25.0%***
Diversification Pool Composite[5]	***25.0%***

When the decision is made to strategically deviate from the broad market within an asset

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[3] The real rate of return is the rate by which long-term total return exceeds the long-term inflation rate. In calculations made by the System's actuary, a real return assumption of 4.5% is used. The 5% objective stated above allows for certain contingencies such as (i) wage inflation exceeding price inflation and (ii) potential future benefit increases and/or contribution rate decreases. The current assumed long term inflation rate is four (4.0) percent per annum.

[4] For this purpose, a full economic cycle is thought to be four to seven years.

[5] Diversification Pool Policy Benchmark - 40.0% IMA TIPS, 24.0% Hybrid Lehman MBS/ABS (67/33), 16.0% Lehman AAA-AA Intermediate Corporate, 10.0% Lehman Intermediate Treasury, and 10.0% GSCI – 50 basis points.

class it is important to have a set of strategic benchmarks to use over shorter periods of time to gauge the Portfolio's performance. The strategic benchmarks are generally more narrowly defined and focus on the specific investment "strategies" within the asset classes. Since the strategy benchmarks more clearly identify the expected returns for a given within class structure, they more objectively measure the Staff's and/or the Consultant's role, which is to implement the Board's policy and strategy directives. For example, while the Policy Benchmark for the MOSERS' domestic equity portfolio is the Russell 3000, this benchmark provides little insight into how the domestic equity portfolio is performing relative to a passive mix consistent with the Board's decision to strategically overweight small stocks and value stocks. The strategy benchmarks should provide the Board with a tool to evaluate the ability of the Staff and the Consultant in implementing the strategic directives. It should be noted that, in some cases, when no specific strategy has been undertaken, the Policy Benchmark and the Strategy Benchmark are the same.

The Strategy Benchmarks are:

STRATEGY BENCHMARKS	*PERCENTAGE OF TOTAL BENCHMARK*
***Domestic Equity Strategy*[6]**	***50.0%***
***International Strategy*[7]**	***25.0%***
***Diversification Pool Strategy*[8]**	***25.0%***

Beyond the strategy benchmarks, it is the responsibility of Staff and the Consultant to determine performance expectations for each manager. The specific performance criteria for each manager is to be addressed in the manager's specific operational guidelines. These guidelines will be maintained in the Implementation Manual.

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6 Domestic Equity Strategy Benchmark – 50% S%P 500, 20% Russell 2500 Value and 30% Russell 3000.
7 International Strategy Benchmark – same as policy benchmark.
8 Diversification Pool Strategy Benchmark – same as the policy benchmark

VII. Permissible Investments

Listed below are the investment vehicles specifically permitted under this Investment Policy. They are categorized as Equity and Diversification Pool to indicate how they are classified for purposes of the Policy Mix:[9]

Equity Investment Vehicles:

- Common Stocks
- Preferred Stocks
- Convertible Stocks & Convertible Bonds
- Private Equity
- American Depository Receipts (ADRs)
- Real Estate Investment Trusts (REITs)
- Hedge Funds
- Non-Investment Grade Corporate Bonds

Diversification Pool Investment Vehicles:

- Treasury & Agency Debt
- Investment Grade Corporate Bonds
- Convertible Stocks & Convertible Bonds
- Mortgage Backed & Asset Backed Securities
- Cash and Cash-Equivalent Securities
- Money Market Funds
- Bank Short-term Investment Funds (STIFs)
- Commodity Index Products
- Inflation Indexed (Real) Bonds
- Private Placement Mortgages
- Equity Real Estate
- Commingled Real Estate Funds
- Real Estate Investment Trusts (REITs)

VIII. General Investment Restrictions and/or Guidelines

1. No leverage will be used with any investment strategy. The use of futures to rebalance the fund as provided in this document is not considered to be leverage.

2. Assets may be held in commingled funds and/or privately managed separate accounts. Exposure through commingled funds shall be evaluated on a case-specific basis through analysis of the fund's "offering document". Upon approval by the Staff, the "offering document" becomes the specific investment guidelines for that allocation.

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[9] Investments listed here are for general information purposes only. Each manager retained by the Board will be given specific instructions with regard to permissible investments relevant to their role in MOSERS' investment process.

3. Derivative securities and synthetic products including futures, options, swaps, and forward contracts (and/or combinations of these instruments), and pooled, mutual or segregated funds that employ derivative and synthetic products may not be used by any investment manager without the written authorization of the Director, CIO and the Consultant.

4. Without prior Staff approval, the securities representing debt and equity of any one company shall not exceed five percent of the market value at cost of any managers' portfolio except for the concentrated domestic equity manager portfolio(s) where the exposure shall not exceed ten percent at cost.

5. All investments made shall be subject to the quality and diversification restrictions established by Section 105.688 of the Revised Statutes of Missouri.

6. No investment or action pursuant to an investment may be taken unless expressly permitted by this Policy. Exceptions may be made subject to prior review by and express written authorization from the Board. In the event that any exception is discovered which has not been specifically authorized, such exception will be immediately reported to the Board by the Director together with a detailed explanation of the exception and action which is being taken to remedy the situation.

7. Cash equivalents held by managers can be disruptive to the allocation process. Managers are therefore expected to be fully invested at all times in the types of securities for which they have responsibility, with the exception of brief periods between the sale of an existing security and the purchase of a replacement security. The System may choose to hire managers specializing in market timing; these managers may be authorized to hold cash equivalents. Absent specific prior written authorization, no manager shall hold more than five (5) percent of their allocated funds in cash equivalents.

8. The Board is responsible for establishing and maintaining the Rebalancing Policy (Appendix I). This policy outlines the timing and method by which the portfolio is to be rebalanced. Based on this policy, it will be necessary to periodically rebalance the portfolio as a result of market value fluctuations. The Board has delegated the rebalancing responsibilities to Staff, to be implemented in accordance with the policy.

IX. Responsibilities of External Investment Managers

MOSERS may utilize investment managers to implement its investment programs. These managers will have demonstrated expertise with particular asset classes and/or management styles. Each external investment manager shall be a registered advisor under the Investment Advisers Act of 1940 (or shall be appropriately exempt from registration).

Individual operational guidelines will be established for each manager and shall be included in the MOSERS' Implementation Manual. These guidelines will be specific as to the particular role of that manager's portfolio in the overall investment structure, and will address the following topics:

Permissible Investments	Style Adherence	Diversification
Portfolio Quality Requirements	Performance Objectives	Brokerage Issues
Manager-Specific Issues		

Managers will be delegated the duties of sector and security selection, portfolio quality and timing of purchases and sales, subject to their specific guidelines. Compliance with these guidelines is mandatory. No deviation will be permitted without an amendment to the manager's specific operational guidelines signed by the Director, CIO and the Consultant.

Communications

A manager employed by the System is expected to communicate, in writing to the CIO, any developments that may impact the System's portfolio within five (5) business days of occurrence. Examples of these events include, but are not limited to:

- a significant change in investment philosophy;
- a loss of key management personnel;
- a new portfolio manager being assigned to the System's account;
- a change in the ownership structure of the manager's firm; or
- any occurrence which might potentially impact the management, professionalism, integrity or financial position of the investment management firm.

Additionally, managers will be responsible for meeting with the Staff and Consultant approximately once every six months. One of the two meetings will be held at the manager's place of business and the other meeting will be held at the MOSERS' offices. As a replacement for the manager's visit to MOSERS' offices, a videoconference may be arranged with approval of the CIO. Staff will coordinate with the manager to arrive at acceptable meeting dates.

Benchmarks

Each manager's benchmark will reflect that manager's particular style or tactical role in MOSERS' investment process. Each benchmark will be clearly specified, measurable and investable. Benchmarks do not have to be published or widely recognized; they may be "customized" for a particular investment style or styles. The proper benchmark shall be determined in advance of funding by mutual agreement between the manager, Staff, and Consultant.

Performance Reporting

All investment managers under contract with MOSERS will report investment performance to Staff upon request. The Board requires that its managers utilize a

standard reporting format. There will be no exceptions to this requirement. The standardized format for this report is included in the Implementation Manual. Managers may however provide their standard performance reports as supplemental information to the MOSERS' standardized report. Please refer to the following section of this document for more information.

Ramifications of Non-Compliance

All investment managers are employed at the pleasure of the System, with a ten-day termination notice provision in MOSERS' Standard Manager Contract. Failure to follow these generic guidelines, and/or the manager-specific guidelines as set forth in this section and the Implementation Manual may result in termination.

X. Performance Monitoring

Performance reviews are a critical part of the portfolio management process. The Board will rely on Staff, the external managers, consultants, and custodian to provide periodic performance reviews**.**

Managers: shall, as directed by Staff, provide periodic performance reports utilizing a standardized reporting format. There will be no exceptions. Managers may provide their standard performance information in a different format as supplemental information only, at their discretion. Managers may be asked to make periodic performance presentations to Staff.

Custodian: shall**,** as directed by Staff, provide periodic performance reports. These reports shall detail the individual performance of managers as well as benchmarks and the overall performance of the fund. In addition, the custodian shall present the results of any securities lending activities undertaken during the reporting period.

Consultant: shall provide performance reports to the Board on all internal investment management functions. This information shall be presented to the Board by the Consultant at regular Board meetings. The Consultant will also complete a detailed performance measurement booklet on a quarterly basis and present the booklet to the Board for review.

Staff: shall be responsible for ensuring that performance reports are received in a timely manner from these parties, and will provide continual supervision of the performance reporting on the portfolio. At regular Board meetings, Staff will be responsible for presenting an executive summary of the performance reports generated by the custodian. The executive summary will include information for the most recently available one, three, five and ten year periods.

XI. Implementation

The Board recognizes that the complex investment processes of MOSERS requires a substantial amount of daily attention. It is clear that the Board, meeting periodically, cannot oversee the day-to-day operations of the investment function. This would lead to gross inefficiency of operations, and would likely breach fiduciary duties. In order to promote operational efficiency in the implementation of its Investment Policy, the Board has employed various parties to carry out these duties. The efficiency of operations is critically dependent on the proper delegation and coordination of clearly defined assignments among the various parties listed in Section IV of this document.

This Investment Policy has been written with the intent of providing a broad operational outline, or reference point, for implementing the investment philosophy and practices of MOSERS. Properly structured, a policy document of this nature should require little revision over time. Technical details have been intentionally omitted from this document, due to the volume and complexity of these issues. This information is included in MOSERS' Investment Policy Implementation Manual (Manual). This is a separate document which is available for public inspection and which is maintained in the central files of MOSERS. Where applicable, the Manual should contain information, which is no more than one-year-old. Dated information may be removed from the Manual and stored in MOSERS' files. The Manual will be maintained by Staff, and will contain the following information:

<u>Asset Allocation Assumptions</u>

The asset allocation decision is extremely complex and relies on quantitative computer models. Section V of this Investment Policy contains a general discussion of the asset allocation process and the end results of the model. An important part of the Manual is detailed information regarding the allocation of assets within the broad asset classes. That section of the Manual contains the inputs and assumptions used in the model for both the broad asset classes and strategic allocations. The Manual will also contain summaries of all portfolio rebalancing activities by Staff.

<u>Specific Manager Operational Guidelines</u>

The Manual will contain operational guidelines specifically outlining the tactical role of each individual manager within MOSERS' investment strategy. These guidelines shall include, but are not limited to, general information on each manager, specific descriptions of assignments, communication requirements, proxy voting responsibilities, benchmarks, performance reporting requirements and management fee agreements. These guidelines will be agreed upon by Staff, Consultant, and the individual manager in advance of funding.

<u>Performance Measurement</u>

The performance measurement section shall contain at least the most recent year of quarterly performance information for the Fund.

<u>Cost Management</u>

This section of the Manual shall contain summary information provided by managers about their management fees, brokerage commission expenses and the use of soft dollars.

Miscellaneous Information
The Manual may also include other information pertinent to the investment operations of the System, as deemed appropriate by the Board and Staff.

XII. Glossary of Terms

Asset Allocation Decision - choosing among broad asset classes such as equities, fixed-income securities and real estate.

Beneficiary - the present or potential recipient of a benefit.

Brokerage Commission - payment for administrative costs of trading securities; the cost of execution.

Commingled Fund - a pooling of funds from multiple investors, managed as one account. The client owns units in the pool; similar to a mutual fund.

Corpus - a structure or body; specifically, the investment portfolio of MOSERS.

Diversification - spreading a portfolio over many investments to avoid excessive exposure to any one source of risk.

Electronic Crossing Network - an increasingly popular and cost-effective means of trading securities where issues are traded by computer either intra-day or overnight. These strategies help to reduce or eliminate the market impact of trading and brokerage commissions.

Equity Investment - claims held by the residual owners of a firm. May also be referred to as common stock.

Futures – An exchange traded contract providing for the forward delivery of a security, commodity or bundle of such instruments at pre-specified prices. Some futures require cash settlement rather than actual delivery.

Fiduciary - one who can exercise discretionary authority or can control important aspects of a pension plan's management.

Fixed Income Investment - a security issued by a borrower that obligates the issuer to make specified payments to the holder over a specific period. May also be referred to as "debt" or "bonds".

Marked-to-Market - revaluation of securities to market value.

Policy Mix – The asset allocation selected by the Board, expressed in terms of the percentage of the Portfolio to be represented by the broad asset types available in the market place.

Private Placement - issuance of debt or equity directly to an investor or investors.

Proxy - an instrument empowering an agent to vote for a shareholder.

Rebalancing - realigning the proportions of assets in the Portfolio as needed to assure adherence to the asset allocation model .

Risk - the uncertainty of outcome or the likelihood of not meeting an objective.

Separate Account - funds managed on an individual account basis; no pooling with other investors. The client owns the securities.

Short-Term Investments – Any fixed income investment with less than one year to maturity.

Soft Dollars - the value of goods or services that brokerage houses supply to investment managers "free of charge" in exchange for the investment managers' business.

Strategy Mix – The composition of each of the asset classes identified in the Policy Mix, inclusive of specific directives from the Board related to the (i) passive vs. active management mix, (ii) the internal vs. external management mix and (iii) any overweights /underweights within the Policy Mix based on size, style or sector.

Total Return - interest or dividend income plus any realized or unrealized capital gain (or loss) on an investment, net of any capital contributions or distributions from the corpus.

Appendix I

Rebalancing Policy
Missouri State Employees Retirement System

MANAGING THE POLICY ASSET MIX THROUGH REBALANCING

One of the biggest challenges in managing institutional assets is avoiding the pressure to shift the asset mix in a reactive fashion after meaningful market movement. Shifts resulting from such pressure are inevitably toward the direction of the recent market move. One of the best ways to avoid engaging in these ad hoc allocation shifts is through adoption of a long-term strategic asset allocation policy, with the goal of adhering to it through systematic rebalancing. Rebalancing is the term that describes the periodic movement of funds from one asset or asset class to another.

At the recommendation of Staff and their advisors, the MOSERS' Board of Trustees has adopted a long-term strategic asset allocation policy. In addition to the broad asset allocation policy mix decision, the Board also adopted strategic within-class policy targets. The following table illustrates the Policy Asset Mix and the Within-Class Strategy Mix.

	WITHIN ASSET CLASS POLICY MIX	**BROAD ASSET CLASS POLICY MIX**
Domestic Equity Investments		**50.0%**
IMA S&P 500 Portfolio	25.0%	
Dimensional Fund Advisors	10.0%	
All-Cap Concentrated Composite	15.0%	
International Equity Investments		**25.0%**
Merrill Lynch Asset Management	10.0%	
Silchester International Investors	7.5%	
Mastholm Asset Management	7.5%	
Diversification Pool		**25.0%**
IMA TIPS	10.0%	
BlackRock – MBS & ABS	6.0%	
IMA Corporate	4.0%	
Hoisington – Treasuries	2.5%	
NISA – Commodities	2.5%	

This section of the Implementation Manual discusses the rebalancing study conducted by the Staff and their advisors and describes the procedures in place for maintaining the adopted strategic allocations shown above, through systematic rebalancing. A mechanistic rebalancing strategy helps MOSERS achieve two goals: First, it allows the portfolio to remain at or near the targeted allocations. Second, historical analysis of portfolio returns when rebalancing is used indicates that rebalancing reduces volatility, relative to the Strategic Benchmark Portfolio, and may add modest value over a drifting mix.

It is with these two goals in mind that the following plan was established for ***when*** and ***how*** the MOSERS' portfolio will be rebalanced. The final two sections will formalize the ***mechanics to accomplish rebalancing*** and also describe how ***new cashflows from contributions*** will be allocated.

Before answering the questions regarding "when and how", we will first identify some relevant findings from the rebalancing study that appear to be of utmost importance. Those findings are as follows:

- The existence of a formalized plan of action is much more important than the choice of which method has historically provided the most value added.
- Rebalancing has the most dramatic impact at the stock vs. bond level, because historically these two asset classes vary greatly in return, volatility, and correlation.
- Rebalancing domestic assets vs. international assets also seems to add incremental value.
- Rebalancing at the style level or at the manager level has historically had little impact because the returns, volatility and correlation are relatively similar.

With these thoughts in mind we will proceed.

I. WHEN?

The first question addressed by Staff and their advisors was "When should the portfolio be rebalanced?" There are two ways this issue could be addressed.

Method 1 - Utilize specific dates as rebalance triggers. In other words rebalance yearly or quarterly.

Method 2 - Establish a range by which the strategic allocation may vary, only rebalancing when the actual allocation moves outside the predetermined range.

As the two methods were analyzed, Staff and their advisors gained a slightly higher level of comfort with Method 2. Therefore, the following ranges were established as the trigger points at which rebalancing will occur. It is important to note that if any one of these asset classes hits a trigger point, the result will be rebalancing that asset class and those other asset classes that have the greatest potential for stabilizing performance of the fund, subject to the additional limitations and considerations addressed below.

	Policy Mix	Futures – Triggers	Upper Trigger – Futures	Lower Trigger - Futures	Futures Limits	Securities - Triggers	Upper Trigger - Securities	Lower Trigger - Securities
Domestic Equity	50.00%	+/- 0.75%	50.75%	49.25%	2.0%	+/- 4.25%	54.25%	45.75%
Int'l Equity	25.00%	+/- 1.50%	26.50%	23.50%	2.0%	+/- 3.25%	28.25%	21.75%
Fixed Income	12.50%	+/- 0.75%	13.25%	11.75%	2.0%	+/- 2.0%	14.50%	10.50%
30 yr. TIPS	10.00%	N/A	N/A	N/A	N/A	+/- 1.25%	11.25%	8.75%
GSCI - 50	2.50%	N/A	N/A	N/A	N/A	+/- 0.50%	3.00%	2.00%

II. HOW?

Once the determination was made as to when the Portfolio would be rebalanced, the Staff and Consultant focused on how it should be accomplished. Once again, two methods were analyzed:

Method 1 - Rebalance through the use of futures. Using futures to rebalance the MOSERS' portfolio is the most cost-effective way, especially if rebalancing is expected to occur frequently and if there is a significant possibility that a rebalancing transaction is temporary and will subsequently be reversed. However, the accumulation of futures positions should be limited since futures are generally more expensive than securities market transactions as a way of accomplishing a permanent allocation. The main drawback of using futures to rebalance is the political risk that any public fund faces when involving itself in derivatives.

Method 2 - Rebalance through the use of securities transactions. In other words, physically moving dollars from one asset class or one manager to another. When using this method care must be taken to remain fully invested. Those involved must also be aware of the trade off between getting the Portfolio repositioned quickly and the cost associated with doing so.

Using consensus forecasts of future market volatility as a guide, the results of the study indicated that the MOSERS' portfolio may be rebalanced as many as 3-4 times a year on average. In addition, the study showed that there is a limit to the benefit of rebalancing with futures. Therefore, maximum limits were placed on the use of futures for each asset class. Futures will be used up to these limits if the trigger points specified in the table above are reached. The resulting futures transaction will adjust the allocation back to the "upper trigger", subject to the minimum transaction sizes determined by Staff and the rebalancing manager. Securities transactions will be used for adjustments if a futures limit has been reached and a securities trigger is hit, again subject to minimum transaction sizes. Each transaction, whether a futures transaction or a securities transaction, will be an "equally weighted" transaction. That is, any sell (i.e., short) transaction(s) must be matched by buy (i.e., long) transaction(s).

III. THE MECHANICS OF REBALANCING

MOSERS will engage a rebalancing manager to oversee the use of futures in rebalancing the fund. The rebalancing manager will work closely with Staff to develop specific operational guidelines consistent with this policy to be used in implementing the Rebalancing Policy.

As was stated earlier, if any one asset class hits a trigger point, the result will be rebalancing that asset class and those other asset classes that have the greatest potential for stabilizing performance of the fund, subject to potential size limitations. As one might imagine, there are many ways that this could occur. Outlining a step by step process would only serve to encumber the flexibility needed to rebalance in the most efficient manner possible. Circumstances surrounding individual managers at the time a trigger is reached will dictate the exact route to be taken to arrive at a rebalanced portfolio. However, what can be done is to identify certain items that will need to be addressed as any rebalancing plan unfolds and to attempt to prioritize these items. Here is a working list of things to consider when a rebalancing trigger point is reached:

Effective communication of the rebalancing plan is the key to a low cost, efficient rebalancing.

For a futures rebalancing transaction:

1. The rebalancing manager will inform the Staff that a futures transaction is planned, and review the transaction with Staff as requested.
2. The rebalancing manager will inform the custodian that a futures transaction is planned.
3. The rebalancing manager will execute the futures transaction with authorized counterparties at times and in amounts that in its judgements best serve the interests of the Fund and in accordance with the limits placed on futures.
4. The rebalancing manager shall provide periodic reports on the status of any futures transactions to Staff so long as any futures positions are outstanding.

For a securities rebalancing transaction:

1. The rebalancing manager will inform Staff that a securities rebalance should occur—that is, how much and in which policy asset classes.
2. Staff will inform all parties who may be involved in the rebalance, and explain what this means to each of them specifically.
3. Staff will rebalance the portfolio in such a fashion as to minimize differences between the strategy allocation and the actual allocation.

IV. NEW CASHFLOWS FROM CONTRIBUTIONS

In the event that contributions on a monthly basis exceed benefit payments, these contributions will initially flow into the cash reserve account. It is necessary to maintain a balance equal to one month's contribution in the cash reserve account in order to pay benefits. Any cash from contributions in excess of the amount needed for benefit payments will be allowed to accumulate in the cash reserve account for up to three months. The following decision tree will determine which manager(s) receives funds from the cash reserve account in excess of amounts needed for benefit payments.

1. Determine which asset class is the furthest below its policy target.
2. Within this asset class determine which manager is the furthest below their policy target.
3. If this manager can take the entire contribution without causing an overfunded status then, the CIO or his designee shall direct the custodian to transfer the entire amount to the manager.
4. If the manager can't take the entire contribution without causing an overfunded status then, the CIO or his designee shall direct the custodian to transfer only that amount needed to fully fund the manager.
5. Remaining funds shall be allocated using steps three and four until the entire amount is distributed.
6. Coordinate with the rebalancing manager if futures are to be removed.

Prior to and in anticipation of a distribution of funds from the cash reserve account, futures in amounts corresponding to balances in the cash reserve account may be used to adjust the asset allocation.

Appendix II

Service Provider Hiring & Termination Policy
Missouri State Employees Retirement System

Introduction

The Trustees of the Missouri State Employees Retirement System (MOSERS) have established the following policy and procedures for hiring and/or terminating external money managers, securities lending managers and the master custodian ("service providers"). The Board hereby delegates to Management Staff the final decision making authority with respect to these areas. This delegation will automatically be rescinded if the present Director, CIO or Consultant are no longer employed or retained by MOSERS. Otherwise, continuation of this policy is primarily dependent on Management Staff adhering to the procedures outlined herein and doing so to the Board's satisfaction.

In establishing this policy, it is the Board's intention to assure all interested parties that decisions made in carrying out this policy occur in a full disclosure environment characterized by competitive bidding, objective evaluation, and proper documentation. The overriding consideration with respect to all decisions is that they shall be made solely in the interest of plan participants and beneficiaries. To assure that Management Staff's actions in this regard adhere to the Board's intentions, all such action shall be unanimously agreed to by the Executive Director, CIO and Consultant and shall be documented and reported to the Board on a timely basis following the conclusion of the decision. Upon reaching a unanimous agreement, the Executive Director and/or his designee is authorized to execute any and all agreements necessary to implement the decision. The Executive Director has designated the CIO as an additional person with authority to execute the agreements described in this paragraph.

Clearly Defined Objectives

Any action to hire or terminate a service provider will be based on one or more of the following observations:

- Identification of a new asset class or approach which has been approved in advance by the Board.
- A diversification of styles within an existing asset class.
- The removal of one service provider in favor of another.

Documentation regarding any such action will include a full description of the reason for the action, the benefit to the total fund, the specific elements serving as the basis for the evaluation, as well as identification of the parties involved and their responsibilities.

Documentation will include identification of the relevant issues from a total fund perspective, the assumptions made, the results considered and/or qualitative issues upon which the action was based. An objective discussion of the risks, costs, and perceived benefits is also to be included if appropriate to the subject matter.

Established Selection Criteria

Prior to the evaluation of alternatives, the primary and other relevant considerations shall be identified, described, and ranked by importance. A copy of the RFP used to explore these areas with potential service providers will be attached to the documentation. An evaluation form covering the quantitative and qualitative issues to be considered will be developed for each case and the relative weighing of each evaluation area will be determined.

Competitive Environment

All efforts must be conducted in an open and competitive environment in order to assure that qualified alternative service providers are identified, that expectations and actual results are consistent, and that pricing is reasonable. In cases where multiple providers exist, a meaningful sample of qualified service providers must be considered and evaluated in relationship to each other. In situations in which an investment approach is unique to a specific firm, a full description of the unique characteristics of the firm and the reasons why a competitive alternative does not exist must be fully documented.

Proper Documentation and Full Disclosure

The primary focus of the Board, when reviewing the documentation regarding the hiring or termination of an external investment service provider, shall be on assuring that the Board will be able to satisfy any interested party that decisions were well reasoned, were thoroughly considered, and that the resulting decisions were prudent. Toward this end, Board members will review the written supporting documentation to assure that all relevant issues have been disclosed, that the search process was a fair one, and that the screening process was consistently applied.

Defining Expectations

In the case where a money manager or securities lending manager is hired, the search process document shall include a full description of the return expectations, the absolute and relative risks inherent in the manager's approach, and the proper time horizon for evaluation of results. Relevant comparative measures such as benchmarks and/or peer samples shall be identified. The relevant factors related to expectations of the manager shall be incorporated into the System's Investment Implementation Manual.

In the case where a master custodian is hired , the search process shall include a full description of "deliverables" and time frames for their completion.

Board Reporting and Monitoring

After a service provider is selected, the Board will regularly monitor the service provider's results versus expectations. The System's Management Staff and Consultant will conduct periodic due diligence meetings with the outside organizations and provide the Board with reports summarizing the assessments made. The Management Staff and Consultant are responsible for reporting to the Board on any material events regarding a service provider as well as the action taken, if any.

Approved November 13, 1998
Revised September 21, 2000

Appendix III

Brokerage Policy
Missouri State Employees' Retirement System

As part of its fiduciary responsibility to the members of the System, it is important that the Board maintain a prudent policy pertaining to brokerage commissions paid on securities transactions. The System's Brokerage Policy supersedes any prior Brokerage Policy. The Board hereby delegates discretion over placement and execution of securities transactions to its managers subject to the following constraints:

Brokerage Commissions

The Board believes that electronic crossing networks are an increasingly efficient and cost-effective means of equity trading. In order to encourage their use, the Board requires that its equity managers closely monitor their brokerage commission expenses. Brokerage commissions vary with investment styles and philosophies; some transactions are more or less difficult to execute than others.

Staff, or the Consultant in cases where portfolios are being managed by Staff, will negotiate an average commission per share ceiling for domestic equity portfolios or an average commission as a percent of principal ceiling for international equity portfolios with each manager prior to funding. The ceiling will be included in the specific manager guidelines detailed in the Implementation Manual.

Each of MOSERS' managers will**,** upon request**,** be required to provide Staff, or the Consultant in cases where portfolios are being managed by staff, with a report showing all brokerage transactions effected on behalf of the System. In the event that average commissions exceed the ceiling, a detailed explanation of the reasons why must also be provided. The custodian shall also provide brokerage commission information to Staff.

Directed Commissions/Brokerage

It is the intention of the Board that all securities transactions be effected through brokerage firms to the best advantage of the System regarding price and execution. Given that some transactions are less difficult to execute than others, and that large discount brokers are positioned to efficiently execute the more easily executed trades at highly competitive commission rates, the Board hereby directs investment Managers to use large discount brokers in securities transactions for MOSERS when the objective of best price and execution will not be compromised.

To facilitate the use of such brokers, MOSERS' Staff will work with external investment managers to negotiate the lowest brokerage commission rates possible with a select number of large discount brokerage firms for execution only trades.

Soft Dollars

The Board recognizes that "Soft Dollar" Commissions are allowed under Section 28(e) of the Securities and Exchange Act of 1934 (commonly referred to as the 'Safe Harbor' provisions). However, there is significant controversy surrounding the use and proper allocation of soft dollars by investment managers. The Board therefore requires its managers to provide accounting of soft dollar transactions involving securities of the System. These reports shall be provided periodically upon request to Staff, and shall include the number of shares traded, dollar amount of soft dollar commissions, the brokerage firms to which they were directed, and an explanation of the goods or services received.

Appendix IV

Proxy Voting Policy
Missouri State Employees' Retirement System

Active voting of proxies is an important part of the Board's investment program. Managers will be required to coordinate with Staff in establishing a proxy voting program, and are expected to vote proxies in the interests of the members of the System. This program may include directed voting of shares to parallel recommendations of the Council of Institutional Investors and/or other entities. Records of proxy votes shall be maintained by the managers and submitted to Staff on an annual basis. This review will be coordinated with each manager to confirm consistency of the System position. The Board reserves the right to provide additional proxy voting direction to its managers at any time.

Appendix V

Securities Class Action Litigation Policy
Missouri State Employees' Retirement System

This statement sets forth MOSERS' policy regarding potential participation as lead plaintiff in securities class action lawsuits.

Background

In carrying out its fiduciary duties to prudently invest and manage the assets of the System, MOSERS invests in the stock of various public companies ("issuers"). From time to time, class action lawsuits are brought against the issuers, their directors, and/or their officers for alleged violations of federal and state securities laws relating to various disclosure obligations and, in many cases, other breaches of fiduciary or other duties. As a shareholder, MOSERS is a putative member of the alleged classes (as are most or all of the other shareholders). Frequently, MOSERS receives solicitations from attorneys who seek to represent MOSERS as a lead plaintiff in these class action lawsuits.

Appointment as a Lead Plaintiff

Under the federal Private Securities Litigation Reform Act of 1995, federal courts are required to appoint one or more members of the putative class to serve as the lead plaintiff(s) in securities class action lawsuits. *See* 15 U.S.C. § 78u-4(a)(3)(B). The Act provides a rebuttable presumption that the lead plaintiff is to be the investor with the largest financial interest in the relief sought by the lawsuit, who wants to serve as the lead plaintiff. *See* 15 U.S.C. § 78u-4(a)(3)(B)(iii). Typically, this means that those investors with the largest holdings in the defendant issuer's stock have the right to serve as the lead plaintiff.

In most securities class action lawsuits, several other investors, including many institutional investors with substantially greater investment portfolios than MOSERS, hold more shares in the defendant issuer than MOSERS holds and, thus, have a larger financial interest in the relief sought. Accordingly, in most such lawsuits, an investor other than MOSERS will have the right to serve as the lead plaintiff.

Financial Risks of Serving as Lead Plaintiff

There are financial risks in serving as a lead plaintiff in a securities class action lawsuit. Serving as lead plaintiff or being designated lead plaintiff may have financial risks if the litigation is unsuccessful. Unless the lead plaintiff negotiates an allocation of potential financial risk with other named plaintiffs, the lead plaintiff could bear the costs, expenses or, potentially, attorneys' fees of the opponent if the litigation is unsuccessful or the court grants sanctions under Rule 11 of the *Federal Rules of Civil Procedure*. Finally, regardless of the outcome of the lawsuit, class members could potentially pursue claims against the lead plaintiff for inadequately representing their interests.

In return for assuming these financial risks, the lead plaintiff does not obtain any additional financial benefit from serving as a lead plaintiff, but, instead, shares any final judgment or settlement with the class members on an equal, per share basis (although the lead plaintiff may also recover its attorney’s fees, costs, and expenses if the lawsuit is successful or a settlement is obtained). *See* 15 U.S.C. § 78u-4(a)(4).

MOSERS’ Policy

Based on the foregoing, it is MOSERS’ policy not to serve as a lead plaintiff in securities class action litigation unless MOSERS is among the largest shareholders of the defendant issuer and service as a lead plaintiff is determined to be in the best interest of the System.

Appendix VI

Economically Targeted Investments (ETIs) Policy
Missouri State Employees' Retirement System

For purposes of definition, ETIs are " . . . investments that are selected for the economic benefits they create in addition to the investment return to the employee benefit plan investor."[10] The Board understands that this area is open to broad interpretation. The following criteria, applicable to any investment, will also be applied to investments that might be classified as ETIs:

1. The fiduciary principles of prudence and exclusive interest of participants will not be abrogated or modified in order to increase the attractiveness of ETIs.
2. There will be no concession on rate of return. This means there will be no hidden subsidies and that the classic "efficient frontier" test is applicable: a commensurate unit of return will be received for each unit of risk incurred.
3. All participation should be voluntary on the part of the System and should not stem from a legal or policy mandate.
4. Each ETI will be evaluated using an integral, objective process -- that is, each will be meticulously analyzed solely on its own risk/return characteristics. No weight will be given to redeeming social interests.
5. The System will participate only if at least one other comparable investor is participating.

When evaluating an investment, appropriate consideration must be given to the role that the investment or investment course of action plays (in terms of diversification, liquidity, risk and return) with respect to the entire Investment Portfolio of the System. Consideration should also be given to alternative investments with similar risks available to the System. The Board believes this set of investment criteria is in full compliance with Section 105.688. RSMo., quoted previously in Section II of this document.

[10] Labor Department Interpretive Bulletin on Economically Targeted Investments, June 23, 1994, 59 FR. 32606.

Appendix VII

Consultant Notification Policy
Missouri State Employees' Retirement System

The External Asset Consultant is hired by and works for the Board of Trustees. Essential to the successful completion of the tasks involved in the role of the Consultant, as defined by the Board, is a collegial, cooperative relationship with the Director and Staff. Together, the Staff and Consultant, prepare and present reports on investment performance and the results of manager due diligence meetings, as well as recommend total fund investment opportunities. In addition, the Director, CIO and Consultant, by name, have been delegated authority to negotiate and enter into or terminate contracts with all investment-related service providers.

The Board has also charged the external investment Consultant with the responsibility of monitoring the policies governing the Internally Managed Accounts (IMA's) as well as the implementation of these portfolios. Regular written analysis is provided to the Consultant, and semi-annual meetings between the Consultant and Staff are conducted. Reports on these semi-annual meetings are presented to the Board by the Consultant.

In connection with the Consultant's role related to oversight of Staff investment activity, it is the Board's position that it is imperative for the Consultant to have the independence and ability to inform them in the event of a material finding/concern regarding staff and the assets they manage. Accordingly, the Board directs the Consultant to adhere to the following notification process if, in the Consultant's view, circumstances dictate:

- ♦ Upon learning of an issue that the Consultant believes is material regarding deviation from prudence, objectivity, guideline adherence or any other matter of concern involving Staff and the internally managed portfolios, the Consultant is to express that concern in writing to the Director of the System and provide the Chairman of the Board with a copy. The Executive Director will have three business days to respond to the issues identified by the Consultant. Copies of this response will be sent to the Consultant and the Chairman.

- ♦ If the Consultant believes the issue warrants immediate action, the Consultant must make this clear in the original correspondence and, in addition, recommend action to be taken. In this instance, a concerted effort must be made by the Consultant to contact the Board Chairman, by phone, at the time the original correspondence is sent, in order to provide a verbal description of the issue, the proposed action, and the justification for both.

- ♦ Upon receipt of the Director's response, the Chairman and the Consultant will review the response at the earliest practical time and determine the proper course of

action. As determined by the Chairman and the Consultant, Board members will be contacted if it is concluded that further immediate action is required.

Approved January 21, 1999

Appendix VIII

Securities Lending Policy
Missouri State Employees' Retirement System

The Board has elected to participate in securities lending and has set forth the following policy related to this activity. In the event the Director, CIO and the Consultant are in agreement that the risks' inherent in lending MOSERS' securities have increased to a point that the risk/return tradeoff is no longer acceptable, the program may be temporarily suspended without Board consent. Following such a suspension the Board will be notified and at the next regularly scheduled meeting a decision will be made by the Board to either reinstate the program or continue suspension indefinitely.

The Board has delegated the authority, in accordance with the Board's Service Provider Hiring and Termination Policy (Appendix II), to the Director, CIO and the Consultant, to retain or dismiss securities lending manager(s).

- The lending program may be implemented through the use of agent lenders or principle lenders.
- The lenders may lend financial securities including, but not limited to U.S. and non-U.S. equities, corporate bonds and U.S. and non-U.S. government securities.
- If an agent program is implemented, the agent shall have full discretion over the selection of borrowers and shall continually review the creditworthiness of potential borrowers through extensive analysis of publicly available information and any other material available to them.
- If a principle program is implemented credit review of the principle lender will rest with MOSERS' Staff.
- All loans shall be fully collateralized with cash, government securities or irrevocable bank letters of credit.
- Cash collateral received from securities borrowers will be deposited upon receipt in a pre-approved short-term investment vehicle or vehicles.
- Collateralization of loans shall be at least 102% of the market value of loaned domestic securities plus accrued income and 105% for non-U.S. loans, respectively.
- Securities on loan should be marked-to-market on a daily basis to assess adequacy of collateralization.
- The lender(s) shall provide periodic performance reports to MOSERS' Staff.
- The Securities Lending Program should in no way inhibit the portfolio management activities of the other managers of the System.
- MOSERS' Staff shall be responsible for making an annual report to the Board on securities lending activity.
- All other operational aspects of MOSERS' lending program are hereby delegated to MOSERS' Staff.